Case 2:25-mj-30370-DUTY ECF No. 1 Page 10 16/09/25 Page 1 of 16 Telephone: (313) 226-9100

Special Agent: Edward Nieh Telephone: (313) 965-2323 AO 91 (Rev. 11/11) Criminal Complaint

UNITED STATES DISTRICT COURT

for the

Eastern District of Michigan

United States of America
v.
Chengxuan Han

Case No.

2:25-mj-30370

Judge: Unassigned,

Filed: 06-09-2025 At 11:41 AM CMP USA V. HAN (DA)

		CI	RIMINAL COMPLA	INT		
I, the cor	nplainant in this ca	se, state that t	he following is true to	the best of my know	ledge and belief.	
On or about the date(s) of		Septembe	r 2024 to June 8, 2025	in the county of _	Wayne/Washtenaw	_ in the
Eastern	District of	Michigan	, the defendant(s)	violated:		
Code Section			Offense Description			
18 U.S.C. § 545			Smuggling goods into the United States			
18 U.S.C. § 1001			False statements			
This crin See attached affida	ninal complaint is b	ased on these	e facts:			
✓ Continued of	n the attached sheet		2	Complainan	200 t's signature	
			Edwar	d Nieh, Special Agent	(FBI)	
and/or by reliable el		nce	4	Printed nai	ne and title a. Staffor	d
Date: June 9,	2023			Judge's s	signature	
City and state: <u>Deta</u>	roit, Michigan		Eliza	beth Stafford, United S Printed na	tates Magistrate Judge me and title	

AFFIDAVIT IN SUPPORT OF AN APPLICATION FOR A CRIMINAL COMPLAINT

I, Edward Nieh, a Special Agent with the Federal Bureau of Investigation (FBI), being duly sworn, depose and state as follows:

INTRODUCTION AND AGENT BACKGROUND

- 1. I am a Special Agent with the Federal Bureau of Investigation. I have been employed in this capacity since March 2024 and am currently assigned to the Counterintelligence Division in the Detroit Field Office. The FBI's Counterintelligence Division is responsible for exposing, preventing, and investigating ongoing national security threats from foreign intelligence services and other intelligence activities within the United States.
- 2. I make this affidavit in support of an application for a criminal complaint and arrest warrant charging Chengxuan HAN with violations of Title 18, United State Code, Section 545 (smuggling goods into the United States) and Title 18, United State Code, Section 1001 (false statements).
- 3. The facts contained in this affidavit come from my personal observations, my training and experience, my review of documents and statements, and information obtained from other law enforcement officers and/or individuals with knowledge of this matter. This affidavit is intended to show merely that there

is sufficient probable cause for the requested complaint and arrest warrant and does not set forth all my knowledge regarding this matter.

EXECUTIVE SUMMARY

- 4. Chengxuan HAN is a citizen of the People's Republic of China (PRC) who obtained her master's degree and is currently pursuing a Ph.D. from the College of Life Science and Technology in the Huazhong University of Science and Technology (HUST) in Wuhan, PRC. HAN was refused her initial U.S. visa on March 18, 2025, with the cited reason being that she struggled significantly to conduct the interview in English a necessary condition for the J1 visa. Consular notes indicated HAN could not clearly answer basic questions about herself or her research. HAN reapplied a second time for a J1 visa on March 27, 2025. The consular officer specifically noted that she spoke credibly about her educational background, current studies, and post graduate plans.
- 5. From September of 2024 to March of 2025, HAN was listed as the sender of four separate packages of concealed or mis-manifested biological material addressed to individuals associated with the UM PROFESSOR Laboratory (UM LAB) at the University of Michigan. According to shipping records, the consignees were RECIPIENT 1 and RECIPIENT 2. These packages did not contain the correct documentation and were not imported per correct USDA or CBP regulations.

6. On June 8, 2025, HAN arrived at the McNamara Terminal of the Detroit Metropolitan Airport (DTW) on board a flight from Shanghai, PRC, which arrived at approximately 6:20 PM. HAN was inspected and interviewed by CBP Officers upon her arrival. During the secondary inspection, HAN made false statements that she had not sent packages to members of the UM LAB. When pressed, HAN admitted that she had shipped packages to members of the UM LAB. HAN initially stated to CBP officers that the packages were plastic cups (rather than petri dishes) and a book (omitting the envelope with suspected biological materials concealed in it). CBP Officers confronted her about the packages containing biological materials, and HAN admitted that she had sent packages containing nematode growth medium (NGM) (in the petri dishes) and plasmids (in the envelope). Based on my training and experience, it is unlikely that the petri dishes contained solely NGM because NGM is readily available and inexpensive in the United States. CBP Officers conducted a manual review of HAN's electronic devices and found HAN had deleted the content of her devices three days prior to her arrival to the United States.

¹ NGM is a specific type of nutrient-rich agar-based medium used to cultivate nematode worms like C. elegans in laboratory settings.

7. At the conclusion of the border inspection by CBP, a custodial interview was conducted by agents from FBI and HSI. HAN admitted to sending four separate packages to members of the UM LAB. Further, HAN admitted the packages contained plasmids and petri dishes of C. elegans from her research laboratory at HUST, located in Wuhan, PRC. HAN admitted to making false statements to CBP Officers during her inspection.

PROBABLE CAUSE

Background Information on the UM LAB

- 8. According to the UM LAB website, the laboratory studies sensory biology, including mechanosensation, thermosensation, chemosensation, photosensation, and nociception. The UM LAB focuses on sensory transduction, sensory processing, and sensory regulation of aging. HAN's offer letter from the University of Michigan states that she was invited as a visiting scholar to the UM LAB.
- 9. According to the UM LAB website, RECIPIENT 1 is identified as an active member of the UM LAB. From the University of Michigan online directory, RECIPIENT 2 is identified as a member of the faculty and staff of the Life Sciences Institute at University of Michigan. The Student and Exchange Visitor Information System (SEVIS) record for RECIPIENT 2, dated June 17, 2024, lists UM PROFESSOR as RECIPIENT 2's point of contact.

Background on USDA Permit Process

10. On the USDA website, there is a search option to validate if an organism requires a permit.² A search of Caenorhabditis elegans (C. elegans) reveals that the USDA requires a permit for the importation of C. elegans. The U.S. Code of Federal Regulations, in 9 CFR §122.2, mandates that "no organisms or vectors shall be imported into the United States or transported from one State or Territory or the District of Columbia to another State or Territory or the District of Columbia without a permit".

Background on Chengxuan HAN

11. Chengxuan HAN is a citizen of the PRC who obtained her master's degree and is currently pursuing a Ph.D. from the College of Life Science and Technology in the HUST in the PRC. According to HAN's personal statement found in her immigration paperwork, HAN studies fundamental questions in neuroscience and physiology. Specifically, her research aims to understand how animals detect sensory cues such as touch, light, chemicals, and temperature and how the neural circuits and synapses process sensory information to produce behavioral output. Additionally, HAN's research seeks to understand how genes and drugs regulate

² https://efile.aphis.usda.gov/s/brs-permitting-assistant

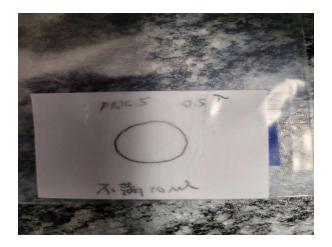
these processes. HAN has been a co-author of two articles relating to research with the use of C. elegans. HAN listed UM PROFESSOR as her advisor at the University of Michigan.

- 12. HAN was refused her initial visa on March 18, 2025, with the cited reason being that she struggled significantly to conduct the interview in English a necessary condition for the J1 visa. Consular notes indicated HAN could not clearly answer basic questions about herself or her research. HAN reapplied a second time for a J1 visa on March 27, 2025. The consular officer specifically noted that she spoke credibly about her educational background, current studies, and post graduate plans.
- 13. HAN stated that her post-study plans were to return to China. She stated that she had to complete her doctoral dissertation defense in the PRC between June and September of 2026.

HAN's Smuggling of Biological Materials to Members of the UM LAB

14. On September 18, 2024, HAN was listed as the shipper for a parcel manifested as a "Letter" (SHIPMENT 1) to RECIPIENT 1 at XXXX Island Drive Ct, Apt XXX, Ann Arbor, MI 48105 (RESIDENCE). This package was seized by CBP, and an inspection revealed a biological sample which appeared to be plasmids labeled as PRK5. *See* Figure 1. According to open-source research, PRK5 likely refers to a gene or protein related to C. elegans.

Figure 1



15. On September 24, 2024, HAN was listed as a shipper for a package (SHIPMENT 2) addressed to RECIPIENT 1 at the RESIDENCE. The shipment was manifested as plastic plates. However, an inspection revealed eight petri dishes containing what appeared to be biological materials. *See* Figure 2.

Figure 2



16. On October 7, 2024, HAN was listed as a shipper for a package manifested as a "Letter" (SHIPMENT 3) to RECIPIENT 1 at the RESIDENCE. An inspection of the package revealed plasmids with the markings "HA Cluk1 Rat." *See* Figure 3.





17. On March 1, 2025, HAN was listed as the shipper for a package manifested as a "Letter" (SHIPMENT 4) to RECIPIENT 2 at the RESIDENCE. An inspection of the package yielded a book with an envelope tucked into the middle of the pages. The envelope contained a handwritten note with 28 shapes and a labeling scheme with each shape. *See* Figure 4. The handwritten note stated: "Hello! This is

a fun letter with interesting patterns. I hope you can enjoy the pleasure within it." Nomenclature of the labels are consistent with biological materials related to C. elegans research. For example, a search of "Goa-nluc" revealed that $G\alpha$ 0 (G-alpha-0) has been shown to modulate neural activity in C. elegans. Nluc (NanoLuc luciferase) is a small, highly stable enzyme used as a luminescent reporter protein in various biomedical research. Searches of the other labeled shapes yielded similar C. elegans related results.

Figure 4



18. All four of the packages were improperly manifested and did not contain the proper documentation for importation. Additionally, the package containing the handwritten note showed signs of concealment. Based on my training and experience, biological samples, such as plasmids, are often placed

within a book and manifested only as a book for shipment, as a means of concealment from U.S. Customs.

CBP Interview of HAN

- 19. After HAN's arrival into the United States on June 8, 2025, CBP Officers conducted a secondary inspection and interview with a translator present. During this interview, CBP Officers asked HAN if she had sent packages to RECIPIENT 1. HAN replied, "No, I don't remember sending him anything." After CBP Officers brought up specific packages, HAN admitted she had sent packages on occasion. When asked what the packages contained, HAN initially stated that she could not recall what she had sent. CBP Officers asked HAN if she had sent a package manifested as plastic plates. She replied that she had. CBP Officers asked what was in the plates, and HAN replied that it was a water solution, specifically sodium oxide and Agar. CBP Officers displayed a picture of petri dishes from Google images. HAN stated that was what she had shipped.
- 20. CBP Officers asked if HAN had shipped documents. HAN stated that she had. CBP Officers asked why she had sent a book to RECIPIENT 2. HAN replied that she found the book interesting, and she wanted to share it with the recipient. HAN was asked if there was anything besides the book, which she denied. HAN was asked if there was an envelope inside the book, and she replied that she did not understand what CBP Officers meant. After a demonstration of

placing an envelope inside a legal pad, HAN stated that she had sent a document similarly. HAN was asked if anything was inside the envelope. She replied that there was a "picture game" in the book that she had created. CBP Officers showed an image from the seizure SHIPMENT 4, and HAN confirmed that this was her handwritten note. HAN acknowledged that she had acquired the book herself, and no one had prompted her to send it. HAN originally denied that the note contained research material. After further questioning by CBP Officers, however, she admitted that the note contained research material, specifically plasmids. HAN mentioned that the shapes could be cut out and introduced into water to see if the material matched. Based on my training and experience, plasmids are commonly shipped on filter paper, and once received, are extracted using water-based solutions for further use in research. As mentioned above, nomenclature of the labels next to the shapes are consistent with biological materials related to C. elegans research.

21. HAN indicated that she wanted to send RECIPIENT 2 plasmids but was not sure if she was allowed to send them. Therefore, HAN and the mail staff at HUST decided to send the package manifested as a letter.

FBI and HSI Interview of HAN

22. Following the secondary inspection of HAN by CBP Officers, an FBI agent and an HSI agent conducted a custodial interview of HAN with a translator

present. HAN was informed she was being arrested and was advised of her *Miranda* rights. HAN acknowledged she understood her rights and agreed to speak with agents.

- 23. HAN stated she was a doctoral student at HUST and was coming to the University of Michigan for one year to complete her research project. HAN's professor at HUST collaborated with HAN's intended professor at the University of Michigan (UM PROFESSOR). HAN stated she knew RECIPIENT 1 and RECIPIENT 2 from HUST, and they both studied C. elegans. HAN identified RECIPIENT 1 to be a researcher under the direction of UM PROFESSOR and believed RECIPIENT 2 also conducted research in UM PROFESSOR's laboratory. HAN stated she conducted research on C. elegans life cycles at HUST and was intending to continue research at UM PROFESSOR's laboratory. While at HUST, HAN produced desired plasmids using E. coli. HAN isolated the plasmids and injected them into C. elegans as the primary method to conduct her research. Based on my training and experience, plasmids are often used to introduce genetic modifications of organisms, such as C. elegans.
- 24. Agents presented images of SHIPMENT 1 and SHIPMENT 3 to HAN. HAN stated SHIPMENT 1 and SHIPMENT 3 were plasmids that she created in the laboratory at HUST. HAN stated she sent SHIPMENT 1 and SHIPMENT 3 because she thought they would be interesting to RECIPIENT 1.

- 25. Agents presented images of SHIPMENT 2. HAN stated the depicted petri dishes contained C. elegans from her research at HUST. HAN stated she sent SHIPMENT 3 to RECIPIENT 1 because she needed research assistance for her project.
- 26. HAN was presented an image of SHIPMENT 4. HAN stated the depicted filter paper contained 28 separate plasmids from her research at HUST. HAN stated she sent this package to RECIPIENT 2 as a "game" with clues written above each plasmid. HAN stated RECIPIENT 2 would sequence the plasmids to identify what they were for fun. HAN estimated each plasmid would require approximately one week to sequence.
- 27. HAN could not recall exactly how many packages she had sent to the United States and estimated that she sent between 5 to 10 packages. HAN stated she was informed by Chinese couriers that several of the packages were lost in transit. HAN stated RECIPIENT 2 contacted her regarding SHIPMENT 4 and told HAN that U.S. Customs had contacted him regarding the contents of the shipment.
- 28. HAN denied that her professor at HUST and the UM PROFESSOR had knowledge of her shipments. HAN stated she was not directed by anyone to send SHIPMENT 1, SHIPMENT 2, SHIPMENT 3, and SHIPMENT 4. HAN stated RECIPIENT 1 and RECIPIENT 2 did not have knowledge of her shipments

and characterized the shipments as "surprises" for RECIPIENT 1 and RECIPIENT 2.

- 29. HAN stated she deleted the contents of her electronic device prior to coming to the United States. HAN stated she deleted the content to "start fresh" while she was in the United States.
- 30. HAN stated she lied during her interview with CBP officers during the secondary inspection regarding the contents of SHIPMENT 4. HAN stated she believed it would implicate RECIPIENT 2 if she told the truth when asked by CBP officers.

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CONCLUSION

31. Based on the aforementioned factual information, I respectfully submit

that there is probable cause to believe that Chengxuan HAN has committed

violations of Title 18, United State Code, Section 545 (smuggling goods into the

United States contrary 9 C.F.R. § 122.2) and Title 18, United State Code, Section

1001 (false statements). Therefore, I respectfully request that the Court issue a

criminal complaint and corresponding arrest warrant for Chengxuan HAN.

Respectfully submitted,

Edward Nieh, Special Agent

Federal Bureau of InvestigationI

Sworn to before me and signed in my presence and/or by reliable electronic means.

Honorable Elizabeth Stafford

UNITED STATES MAGISTRATE JUDGE

Date: June 9, 2025